

# IRTS Radio News Bulletin Sunday 31 July 2022

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## Islands on the Air weekend

This weekend is the RSGB IOTA contest weekend, offering a unique yearly opportunity for Island chasers to fill their logs and work towards an attractive awards program. Stations listening to this bulletin on Sunday still have a short time window to contact the EJ operators. This year, Shannon Basin Radio Club again operates as EJ3Z from Inishbofin Island off the West Galway coast, as part of the IOTA contest weekend. Inishbofin has the IOTA reference of EU-121 and is a multiplier for anyone on the mainland who will be using EI-115 as their reference. The team is operating a low power portable station in CW and SSB from the island schoolhouse, taking advantage of this weekend's favourable band conditions and they are hoping for many EIs in the logs. Inishbofin is also part of the Galway digital repeater network and can be accessed on DMR TG 27255. Operators are Marty (EI2IAB), Enda (EI2II), Tom (EI4HCB), Keith (EI5IN), Brian (EI8IU), Fergus (EI6IB) and Anthony (EI6GGB). QSL via LoTW.

In conjunction with Henning (OZ2I), Denis (EI4KH), Gerard (EI5KF) and David (EI6IQB) have set up up a station with the callsign EJ1E on Bere Island. They are using CW and SSB with 100W. See QRZ.com or QRZCQ.com for QSL info.

EI9E in Co. Wexford and EI7M in Co. Cork have been very busy throughout the night, both achieving high scores by taking full advantage of good propagation on 40 and 20m.

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## Isle of Man

The Point of Ayre Lighthouse is an active 19th-century lighthouse, sited at the Point of Ayre at the northeastern end of the Isle of Man. Dale (EI7HDB) along with members from the Isle of Man Amateur Radio Society will be activating the lighthouse IM0001 for the weekend of 20th and 21st of August for the Lighthouse and Lifeboat weekend. The club call GT3FL will be used for the event and they hope to be active for the full 48 hours. The station will be live from 80M to 70CM operating CW, SSB and digital modes, so please listen out for them. Dale (EI7HDB) will arrive on the Isle of Man on the 14th of August to set up the station at the Point of Ayre lighthouse. He will be active on most bands as MD/EI7HDB between the 14th and 19th of August operating holiday style, so listen out for him especially if you are looking to get the Isle of Man in your log. The group posts up-to-date information on

## **Poldhu ARC Open Day**

Next weekend, travellers to Britain may consider a stop-over at Poldhu. The RSGB reports that the Poldhu Amateur Radio Club is holding an Open Day on Saturday, the 6 August from 10am. They welcome anyone who has an interest in amateur radio, or those that are already licensed, to join them for the day. There will be an opportunity to operate the club station, have a chat and learn more. The club has a superb site on the cliffs overlooking Poldhu Cove and Mounts Bay, with a triband HF beam and multiple dipoles. The location is close to the Poldhu Cove beach with its café, an ideal location for the family while you indulge your radio passion. Go to Poldhu Cove and follow the signs to the Marconi Centre, where there is a large free car park. For more information, please call Terry, G4CDY on 0044 776 468 1843.

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## **LoTW**

The "Logbook of the World", LOTW stopped working for about a day from the morning of the 22nd of July until about 14:30 Zulu the next Day. The network at ARRL had gone down, and since then e.g. the queue for uploading LoTW files has been longer than the queues on the German motorways this summer. ARRL HQ is in the process of correcting the errors, some of which may not be immediately apparent to the users.

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## **Orbital News**

On the 13th of July, several satellites with amateur radio payloads were launched on the inaugural launch of ArianeSpace's Vega-C rocket. The satellites were placed into a circular orbit of around 5,900 km with a 70 degree inclination, meaning that the Ireland is well covered by their footprints. The AstroBio and Greencube satellites carry amateur digipeater packages that may be useful for long-distance QSOs.

During their space-walk on the 21st of July, Russian cosmonaut Oleg Artemyev and ESA astronaut Samantha Cristoforetti released ten Radioskaf CubeSats into orbit. SSTV and audio signals have been received from many of these satellites. The new satellites are numbered RS1S through RS6S and RS9S through RS12S. They all share the same telemetry frequency of 437.050 MHz with 1200 bps AFSK and the AX25 protocol. The data modem payloads operate on adjacent channels from 437.025 to 437.1125 with 1200, 2400 and 4800 bps AFSK and the AX25 protocol, plus SSTV,

audio and text. Operating instructions and the now established orbital elements for both of these new satellite services can be accessed at [www.amsat.org](http://www.amsat.org)

Low orbit satellite operators have a rare opportunity to contact a highly sought after DXCC on LEO satellites when Philippe, EA4NF will be active on low orbit satellites from the island of Barbados in the Caribbean using the call-sign 8P9NF between the 8th and the 12th of August. He will be using all available LEO-sats that carry SSB transponders and FM relais. Operational info will be updated on Twitter /at/ EA4NF\_SAT, and LoTW entries are for 8P9NF.

Confirming successful commissioning of the Czech satellite named Planetum-1, launched in May from Florida aboard a Falcon 9 rocket, CRK, the Czech Radio Club has published a detailed description and operating instructions for their cubesat with the call-sign OK0PLA. Planetum-1 is a 1-Unit cubesat designed by Planetum, a cluster of Prague observatories and planetariums, to teach and popularise astronomy and cosmonautics. The control centre in the Prague Planetarium is open to school excursions, as well as to various workshops. Planetum-1 features an active orientation system that allows precise maneuvers, as well as pointing of the satellite camera with an accuracy better than 1.5 degrees. It also features a magnetometer to measure the Earth's magnetic field. Orbiting at around 550 km, it carries two cameras, internal and external sensors, and a pair of radios with a unique set of operating modes. The VHF link frequency is 145.925 MHz +/- doppler shift, and the UHF link frequency is 436.680 MHz +/- doppler shift, both with 1 Watt of output. The radios not only support 9600 Baud AX.25 packet-radio, but also CW. Users can use the traditional digipeater function, but more importantly, one can chat with the satellite's onboard computers, either with a packet modem or with a morse key, querying the onboard sensors, the operational state, and view image downloads.

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## **The Slow Demise of Longwave Broadcasting**

There are only few active high-powered long-wave broadcast stations on-the-air. One of the longest serving stations, the Czech transmitter at Topolná, has now fallen silent. Starting regular services in 1923, seeing turbulent times during the second World War, and again during the Czech uprising in 1968, high operational costs finally sealed its fate. Despite the Czech Senate Defence and Security Committee calling on the government to maintain the transmitters for emergency services, while the Ministry of Culture deciding whether to declare the Topolná transmitter a monument, České Radiokomunikace blew up two 270-meter-high masts of the Topolná long-wave transmitter on Thursday, the 28th of July. Even the neighbouring village and its mayor was not made aware of the plans, they also wanted to keep the station as a memorial.

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## **The Propagation Horoscope**

Almost once a week, Spaceweather.com and the students of "Earth to Sky Calculus" fly space weather balloons to the stratosphere over California. These balloons are equipped with sensors that detect secondary cosmic rays, a form of radiation from space that can penetrate all the way down to Earth's surface. Their monitoring program has been underway without interruption for 7 years, resulting in a unique data-set of in-situ atmospheric measurements. Latest results from this month show atmospheric radiation decreasing to the lowest values recorded so far. The radiation drop is caused by increased solar activity, during a faster than predicted rise in activity in Solar Cycle 25. The sun's strengthening and increasingly tangled magnetic field, together with an uptick of coronal mass ejections repel cosmic rays from deep space. Cosmic rays can alter the chemistry of the atmosphere, trigger lightning, and they penetrate commercial air-planes resulting in an increased health risk for flight crews. This weekend will see the third of the new and quite active solar regions rotate into view. Current observations show filaments detaching from at least one of those nearly earth facing regions near a large coronal hole in the southern hemisphere. This will likely lead to geomagnetic disturbances when the plasma cloud of the CMEs arrive mid-week, triggering moderate radio blackouts. The Australian Space Weather Services predict a five percent chance of R1 to R3 blackouts, so does SOHO, currently reporting a solar wind speed of around 350 km per second, yet with a low particle count of five protons per cubic centimeters. The kP index hovers around three as of Sunday, predicted to drop on Monday. The Sporadic-E season is coming to an end. As we are heading into the autumn, combined with the current state of the sun, one can expect the daytime MUF not to rise much above 15 MHz in the coming days.

That is the news for this week. Items for inclusion in next week's radio news can be submitted by email to [newsteam@irts.ie](mailto:newsteam@irts.ie) for automatic forwarding to both the radio and printed news services. The deadline is midnight on Thursday.

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